## Commonwealth of Kentucky Division for Air Quality

# PERMIT STATEMENT OF BASIS

TITLE V (RENEWAL) No. V-05-059 TEXAS EASTERN TRANSMISSION, LP OWINGSVILLE, KY JANUARY 12, 2006

COMPLETED BY: KENVIRONS, INCORPORATED

SOURCE I.D. #: 21-011-00004

SOURCE A.I. #: 37097

ACTIVITY #: APE20050002

#### **SOURCE DESCRIPTION:**

Texas Eastern Transmission Corporation (TET) transports natural gas via underground pipelines from the Gulf Coast region of the United States to the Northeast and Mid-Atlantic United States. At several points along the pipeline, the gas must be recompressed to ensure that it continues to move along the pipeline and can be delivered to customers at serviceable pressures. The Owingsville Compressor Station employs five (5) gas turbines to recompress and move natural gas through transmission pipelines. Natural gas used to fuel the gas-fired units comes from TET's pipeline. These turbines represent the bulk of pollutant emissions for this source.

DAQ acknowledges receipt on May 24, 2002, of a renewal Title V air quality permit application for the Texas Eastern Transmission LP, Owingsville Station facility. This represents the first renewal of the Title V air permit. The permit history is summarized as follows:

Document Name	Date Received	Summary
Title V Operating Permit Application [Log #E778]	11/22/96	Initial Title V air permit application to operate a natural gas compressor station at Owingsville,  Kentucky
Title V Operating Permit V-097-016 Issued	11/24/97	Title V Air Permit issued for Texas Eastern Transmission Corp. Owingsville Station
Title V Operating Permit Renewal Application Log [#54676]	5/24/02	Renewal Title V air permit application to operate a natural gas compressor station at Owingsville,  Kentucky

The Title V renewal application was deemed complete on July 23, 2002 (60 days after receiving application). The facility is classified as a Title V major source of air pollution, based on the potential to emit more than 100 tpy of Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO).

The following is a list of significant emission units.

E. Unit 01 (01-04) Four GE Frame 3 Gas Combustion Turbines, 63.92 mmBTU/hr, each E. Unit 02 (05) One GE Frame 5 Gas Combustion Turbine, 151.89 mmBTU/hr

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#### **COMMENTS:**

The source as a whole is subject regulation 401 KAR 63:020. Emissions from storage tanks at the source were calculated and are below the Insignificant Activity thresholds. Emissions from blow downs and engine start ups were considered as individual events and, as such, are also Insignificant Activities.

EP 01-05

40 CFR 63 Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines applies to the 5 gas turbines at this source. These units were installed prior to 2003 and thus are classified as existing sources. However, per in 40 CFR 63.6090 (b)(4), existing combustion turbines are exempt from meeting the requirements of Subpart YYYY and Subpart A of Part 63. As such, no emission or operational limits, monitoring, testing, recordkeeping, or reporting requirements under Subpart YYYY apply.

Gas turbine emissions at the Owingsville Compressor Station increased since the last calculation of PTE in 1997. This is because in July 2000 turbines used for natural gas compression were removed from AP-42 Section 3.2 for natural gas-fired reciprocating engines and placed with Stationary Gas Turbines in Section 3.1. All emission factors were updated for gas turbines at that time. The emission factor for NOx, based upon manufacturer's specifications was maintained from the initial Title V application. AP-42 emission factors were used for calculation of all other emissions.

There are no controls installed on these turbines.

### **Regulations not applicable:**

<u>40 CFR, Part 64 Compliance Assurance Monitoring (CAM)</u> – The CAM provisions do not apply to this facility since no control devices are employed at the source to meet any applicable emission limitations.

40 CFR 60 Subpart GG, Standards of Performance for Stationary Gas Turbines, incorporated by reference in 401 KAR 60:005, Standards Of Performance For Stationary Gas Turbines — Any existing gas turbine which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part. All existing gas turbines at the Owingsville Compressor Station were installed prior to 1977 and as such they are not subject to new source performance standards.

40 CFR, Part 63 Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities incorporated by reference in 401 KAR 60:005 – With respect to Subpart HH, per 40 CFR 63.760(d), this regulation does not apply to natural gas transmission stations such as the Owingsville Compressor Station. The operations at this station relate only to the transmission of natural gas.

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40 CFR, Part 63 Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities incorporated by reference in 401 KAR 60.005

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With respect to applicability requirements of 40 CFR 63.1270(c) of Subpart HHH, this regulation does not apply to natural gas transmission stations such as the Owingsville Compressor Station. The operations at this station relate only to the transmission of natural gas.

#### **CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.